22.06.20

WALT understand circles

Notes and Guidance

Children will illustrate and name parts of circles, using the words radius, diameter, centre and circumference confidently.

They will also explore the relationship between the radius and the diameter and recognise the diameter is twice the length of the radius.

Mathematical Talk

Why is the centre important?

What is the relationship between the diameter and the radius?
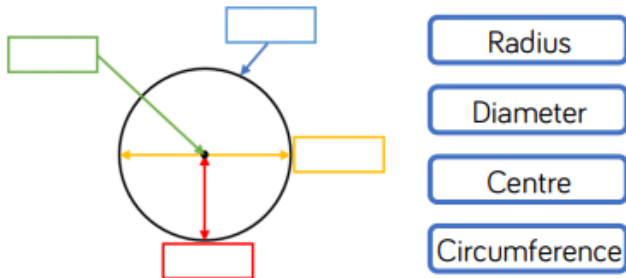If you know one of these, how can you calculate the other?

Can you use the vocabulary of a circle to describe and
compare objects in the classroom?

What are the parts of a circle called?

Watch - https://www.youtube.com/watch?v=5Ni53wpVO2I

Varied Fluency

Using the labels complete the diagram:

| Radius |
| Diameter |
| Centre |
| Circumference |

Find the radius or the diameter for each object below:

The radius is ___.   The diameter is ___. I know this because ___.

Complete the table:

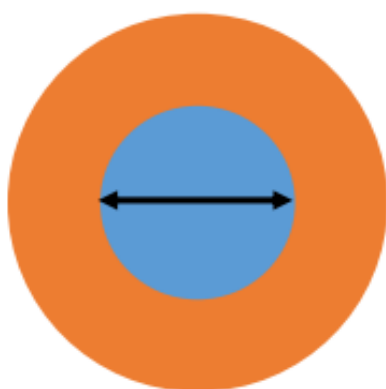| Radius	Diameter
26 cm	
	37 mm
2.55 m	
	99 cm
	19.36 cm

9

Alex says:

The bigger the radius of a circle, the bigger the diameter.

Do you agree? Explain your reasoning.

Here are 2 circles. Circle A is blue; Circle B is orange. The diameter of Circle A is $\frac{3}{4}$ the diameter of Circle B.

If the diameter of Circle B is 12 cm, what is the diameter of Circle A?
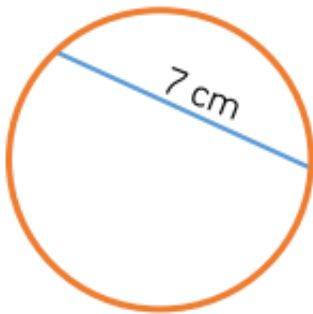
If the diameter of Circle A is 12 cm, what is the radius of Circle B?

If the diameter of Circle B is 6 cm, what is the diameter of Circle A?

If the diameter of Circle A is 6 cm, what is the radius of Circle B?

Spot the mistake!
Tommy has measured and labelled the diameter of the circle below.
He thinks that the radius of this circle will be 3.5 cm.

7 cm

Is Tommy right? Explain why.